DIVISION OF ENVIRONMENTAL HEALTH SOLID WASTE PROGRAM 410 WILLOUGHBY AVENUE, SUITE 105 JUNEAU, ALASKA 99801-1795 http://www.state.ak.us/dec/home.htm

April 15, 1998

**Telephone:** (907) 465-5350

Fax: (907) 465-5362

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED Z 021 047 590

Mr. Eric Klepfer, Manager Environmental and Regulatory Affairs Coeur Alaska, Inc. 431 N. Franklin St., Suite 400 Juneau, AK 99801

Dear Mr. Klepfer:

The Department of Environmental Conservation has completed its evaluation of your request for a solid waste disposal permit at the Kensington Mine. The Department is issuing permit #9811-BA001 in accordance with AS 46, 18 AAC 15, and 18 AAC 60. Please review the conditions and stipulations in the permit and ensure all persons conducting waste disposal operations understand them. This permit is effective upon issuance and expires March 31, 2003.

Page 6 of the permit application form you submitted references property owner approval for solid waste disposal. We did not receive a letter from the U.S. Forest Service on this subject, however we believe the requirements of 18 AAC 60.210(b)(16) concerning property owner approval have been met. The Record of Decision in the "Final Supplemental Environmental Impact Statement" issued by the US Forest Service in August 1997 lists the disposal of dry tailings as the preferred option.

We believe there is a potential for the topsoil on the final cover to erode. We are approving the facility as designed, however if erosion on the cover becomes a problem Appendix A of the permit contains clear language on how the problem will be detected and corrected.

When we issued the public notice to open the comment period on this permit. We included a paragraph concerning a possible waiver of the ground water monitoring requirements. The solid waste regulations do not require ground water monitoring if we are convinced there is "no practical potential for migration of a hazardous constituent from that landfill to an aquifer of resource value". We have decided to waive groundwater monitoring in this case for the reasons outlined in Appendix B.

Any person who disagrees with these decisions may appeal the issuance of this permit by requesting an adjudicatory hearing, using the procedures contained in 18 AAC 15.200-310. Hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 105, Juneau, Alaska 99801-1795, within 30 days of receipt of this letter. If a hearing is not requested within 30 days, the right to appeal is waived and the decision becomes final.

Sincerely,

Heather T. Stockard Solid Waste Program Manager

HTS:gw (g:\es\sw\miller\kensington\newperm..doc)

cc: Roger Birk, USFS

Page 2 of 8

# **Appendix A-Conditions**

The following documents are incorporated as part of the permit.

- 1) Permit application as submitted to the Air and Water Quality Division in September, 1997.
- 2) The Monitoring plan submitted to the Air and Water Quality Division on April 28, 1997

Note: if anything in the permit application conflicts with other parts of Appendix A, the requirements in Appendix C, or state laws, the requirements of Appendix A, Appendix C and state laws take precedence

The following specific conditions are part of the permit:

- 1) Topsoil storage and disposal must be done within the dry tailings facility controlled runoff area or some other area with effective sediment control.
- 2) If the berm or any of the surfaces on the dry tailings disposal facility displace or show signs of slope failure, the permittee must repair the damage and recontour the dry tailings facility so that it has no finished slopes steeper than 3:1.
- 3) The permittee shall check for topsoil erosion and slope failure cracks during the visual monitoring inspections required under 18 AAC 60.800. If the topsoil layer erodes and exposes the coarse till layer in any location the permittee must notify DEC within seven days, and correct the problem in that area within the next 60 growing season days.
- 4) If the top soil erodes to expose the coarse till over more than 5% of any 800 square foot surface selected by the department a new closure plan and corrective action schedule must be submitted within 90 days. If a new closure plan is required under this paragraph, the permittee must propose a closure plan which includes an erosion control blanket over the entire facility, or a new grading plan such that the entire facility contains no finished slopes steeper than a 3:1 grade.
- 5) If the new closure plan is implemented in accordance with the above paragraph, and the top soil again erodes to expose the coarse till over more than 5% of any 800 square foot surface selected by the department, another new closure plan and corrective action schedule must be submitted within 90 days. The permittee shall revise the grading plan so the entire facility contains no finished slopes steeper than a 3:1 grade, and all finished surfaces at the dry tailings facility are covered by an erosion control blanket.

- 6) Establish 2 new surface water monitoring stations at locations to be approved by DEC and begin sampling water at these locations by July 1, 1998.
- 7) Develop 3 new subsurface monitoring wells at locations to be approved by DEC. The new wells will be installed within 30 days after the start of the site development activity.
- 8) If any instrument or visual observation indicates a portion of the Dry Tailings Facility has become saturated with water Coeur Alaska Inc. shall notify the Department, and the City and Borough of Juneau within seven days.
- 9) Post closure monitoring and corrective action agreements must remain in effect for at least 30 years after the closure of the project. During the post closure period visual and surface water monitoring shall be conducted at least two times per year. Once in the spring and once in the fall.
- 10) Provide the Solid Waste Program Manager, Alaska Department of Environmental Conservation, with proof of financial responsibility for post closure care and monitoring as specified below:
  - A. The proof of financial responsibility may be in the form of a bond, insurance agreement, escrow account, or other durable and reliable instrument as deemed suitable by the Solid Waste Program Manager.
  - B It is the responsibility of the permittee to provide acceptable proof of financial responsibility to ADEC prior to the disposal of any solid waste on site. ADEC will accept or reject said Offer of Proof as expeditiously as possible, but in no event later than 10 working days after the receipt of the proffered proof.
  - C. The proof of financial responsibility shall be in the amount of \$300,000.
  - D. Approved proof of financial responsibility must remain available through the post-closure period, and may not be released until the ADEC, Solid Waste Program Manager certifies in writing, that the monitoring period has been successfully completed.

#### **Appendix B- Waiver**

#### Ground water monitoring exemption

The ground water at the Kensington dry tailings facility is assumed to flow toward the marine waters of Lynn Canal. Most of the water flowing under the ground surface is assumed to flow in shallow rock fractures above sea level. These shallow groundwater flows are subject to contamination from surface conditions such as decaying organic matter. Water flowing in rock fractures above sea level in this area is not considered to be an aquifer of resource value.

Some groundwater is probably flowing in deeper cracks and faults beneath the area of the Kensington dry tailings facility. Deep aquifers in bedrock fractures are typically recharged at higher elevations and we can assume they are confined under high hydraulic head pressures. This type of groundwater is difficult to tap as a source of drinking water because finding a suitable crack while drilling in hard rock is expensive, and a matter of luck, yet we can not rule out the existence of a deep aquifer of resource value. We can however state that if such an aquifer exists it would be unlikely that leachate from the Kensington dry tailings facility would cause it to become contaminated. A fresh water aquifer below sea level in this area will probably have an upward flow component and therefore would prevent any contaminated water from seeping in. Any deep aquifer at the dry tailings facility which does not have sufficient head pressure to maintain an upward flow component is subject to salt water intrusion and could not be considered to be an aquifer of resource value.

Some waste (an estimated 25%) will be backfilled into the mine. These wastes will be mixed with cement before they are disposed. DEC does not believe that the solidified wastes placed in the mine can leach any significant amount of contamination to groundwater. Any water which contacts the wastes will be captured by the mine drainage system and discharged on the surface under a water discharge permit

None of the wastes to be disposed at the dry tailings facility are expected to generate acidic leachate. We believe the non-acidic leachate will contain only trace contamination from the metals present in the dry tailings facility. The prompt installation of cover materials and the drainage system shown in the permit application should minimize the leachate generation by preventing water from contacting the waste.

For these reasons the Department believes that there is no practical potential for the Kensington dry tailings facility to contaminate an aquifer of resource value. The groundwater monitoring requirements of 18 AAC 60.820 – 18 AAC 60.860 are suspended. We consider the wells which Coeur installed to monitor the subsurface flows to be part of the surface water monitoring system and therefore sampling of these wells must continue as proposed in the permit application. This waiver will be rescinded if the leachate becomes strongly acidic.

# APPENDIX C: GENERAL CONDITIONS

Page 5 of 8

Date of Issuance: April 15, 1998

## I. ACCESS AND INSPECTION

The permittee shall allow the Commissioner or his representative access to the permitted facilities at reasonable times to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit, State laws, and regulations.

## II. INFORMATION ACCESS

Except for information relating to confidential processes or methods of manufacture, all records and reports submitted in accordance with the terms of this permit shall be available for public inspection at the State of Alaska, Department of Environmental Conservation, 410 Willoughby Avenue, Juneau, Alaska 99801.

# III. <u>CIVIL AND CRIMINAL LIABILITY</u>

Nothing in this permit shall relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond his control, including, but not limited to, accidents, equipment breakdowns, or labor disputes.

## IV. AVAILABILITY

The permittee shall post or maintain a copy of this permit available to the public at the disposal facility.

# V. ADVERSE IMPACT

The permittee shall take all necessary means to minimize any adverse impacts to the receiving waters or lands resulting from noncompliance with any limitation specified in this permit, including any additional monitoring needed to determine the nature and impact of the noncomplying activity. The permittee shall clean up and restore all areas adversely impacted by the noncompliance.

## VI. CULTURAL OR PALEONTOLOGICAL RESOURCES

Should cultural or paleontological resources be discovered as a result of this activity, work which would disturb such resources is to be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately (907-269-8721).

## VII. APPLICATIONS FOR RENEWAL

In accordance with 18 AAC 15.100(d), applications for renewal or amendment of this permit <u>must</u> be made no later than 30 days before the expiration date of the permit or the planned effective date of the amendment.

# VIII. OTHER LEGAL OBLIGATIONS

The requirements, duties, and obligations set forth in this permit are in addition to any requirements, duties, or obligations contained in any permit that the Alaska Department of Environmental Conservation or the U.S. Environmental Protection Agency has issued or may issue to the permittee. This permit does not relieve the permittee from the duty to obtain any and all necessary permits and to comply with the requirements contained in any such permit or with applicable state and federal laws and regulations. All activities conducted by the permittee pursuant to the terms of this permit and all plans implemented by the permittee pursuant to the terms of this permit shall comply with all applicable state and federal laws and regulations.

#### IX. POLLUTION PREVENTION

In order to prevent and minimize present and future pollution, when making management decisions that affect waste generation, the permittee shall consider the following order of priority options: waste source reduction; recycling of waste; waste treatment; and waste disposal.

#### APPENDIX D

#### ALASKA COASTAL MANAGEMENT PROGRAM STIPULATIONS

The following stipulations were adopted pursuant to AS 46.40 and 6 AAC 50.

- (1) The operator shall abide by the provisions of the approved Reclamation Plan
- (2) The operator shall provide to CBJ copies of the periodic monitoring reports required in all state and federal permits. All monitoring reports submitted to CBJ shall include a summary statement at the front of the report that describes any sampling anomalies, observed trends in the data, suggested changes to subsequent monitoring, any problems, and corrective actions taken to address any problem.
- (3) The operator shall limit the visual impacts of the project during construction and operation through the following mitigation measures:
- a. Preserve as much of the existing vegetation as possible between proposed and existing Marine Terminal structures and Lynn Canal.
- b. Revegetate around buildings and other facilities immediately after construction.
- c. Use natural-appearing paints and finishes for construction of buildings, tanks, ore containers, and other structures so that the mine facilities blend in with the surrounding natural landscape.
- d. Design and place exterior lighting such that light and glare are minimized from offshore viewpoints, while assuring that worker safety is not compromised.
- e. Revegetate cut and fill slopes for the access roads and tailings slurry pipeline after construction.
- f. Revegetate embankment slopes where vegetation is possible and other disturbed areas after construction.
- g. Locate overhead lines so that they are not readily noticeable from offshore viewpoints.
- (4) The operator shall prohibit job site access of workers to the sand and gravel borrow pit when avalanche conditions are present.
- (5) Topsoil or growth media shall be applied over regraded areas to a minimum depth of one foot. Any variance from this condition is subject an approved modification of the approved Reclamation Plan.
- (6) Reclaimed sites shall support 75 percent live self-sustaining vegetative cover where revegetation has been undertaken. Any variance from this condition is subject an approved modification of the approved Reclamation Plan.

Stipulations contained in this permit are necessary to protect upland and aquatic habitat per 6 AAC 80.130 HABITATS, water quality per 6 AAC 80.140 LAND, AIR, and WATER QUALITY, and to meet the following JCMP enforceable policies:

- 49.70.905(12) To the extent feasible and prudent, development shall not detract from the scenic qualities of the shorelines, shall be compatible with its surroundings, and shall not significantly block scenic vistas.
- 49.70.910(a) Surface modification that would induce excessive erosion, undermine the support of nearly land, or unnecessarily scar the landscape is prohibited. Any other modification shall be limited to the smallest extent that is needed for development.
- 49.70.910c) Developers shall retain existing vegetative cover to the greatest extent feasible and prudent. In case where development necessitates removal of vegetation, erosion shall be prevented through revegetation, or, if revegetation is not feasible, by other appropriate measures.
- 49.70.950(b) The habitats contained in subsection (a) of this section shall be managed so as to maintain or enhance the biological, physical and chemical characteristics of the habitat, which contribute to its capacity to support living resources.